SAMSUNG

iPOLiS mobile

English Android ver 2.2

Samsung Techwin's iPOLiS mobile is an android based dedicated application for smartphones and tablet PCs to remotely monitor and control Samsung Techwin's network based products.

This manual is based on using the application on Samsung Galaxy Note smartphone. When using a different mobile device, the actual button location and interface may be different.

The iPOLiS mobile application can be downloaded freely and installed from Google Play.

❖ To search iPOLiS mobile application from Google Play, type "**iPOLiS**", "**SAMSUNG TECHWIN**", or **"TECHWIN"** and run a search, ignoring the letter case.

❖ User of previous version software (v1.0) needs to register added devices to the newly installed software again. User of version 1.3 or later does not require re-registering devices after updating the software. Updating will migrate device list to the new software.

❖ If enabled with a password lock, updating for smartphone/tablet PCs other than Samsung Galaxy series may experience problems with updating. In such cases, disable password lock during updating.

This application is optimized for Android OS 2.3.5, 4.0.3 and 4.1.2.

This application had been tested for listed devices:

- Samsung Galaxy S2 (Android v2.3.5) series
- Samsung Galaxy S3 (Android v4.1.2) series
- Samsung Galaxy Note (Android v4.0.3) series
- Samsung Galaxy Note 10.1 (Android v4.1.2) series

0. Before Installation

For proper monitoring with iPOLiS mobile on your device, the device should suffice below requirements:

	Minimum	Recommended
CPU	1GHz	1.2GHz
RAM	128MB	800MB
Available RAM	50MB or more	
Network	3G, 4G(LTE), Wi-Fi	

▪ 3G and 4G(LTE) networks may charge you with excessive fees and can cause a delay or loss. So we recommend you to use the Wi-Fi networks.

1. Adding a Device

To Add a Device

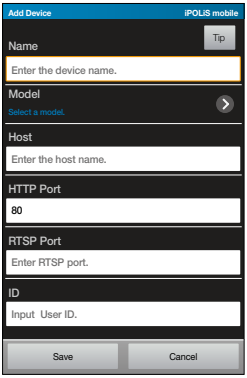
1. Move to the Add Device page.

① If visited with no added device for the first time, <**Add Device**> message appears.

② To add another device, touch the menu button on left bottom side to display Add icon < ⊕ >.

2. Enter the device information to be added in the Add Device page.

- Name : Name the device as desired.
  - If you don't enter, hostname of the device is used by default.
- Model : Select one from the product type listed.
  - Actual model name is not required, it's automatically assigned after adding the device.



- Host : Enter the IP address or host name (registered with DDNS) of the external device according to your Internet connection environment.
- HTTP Port : Enter the connection port for the device.
- RTSP Port : Enter the RTSP port number configured for the device.
  - For DVR and HW NVR, enter the last port number of port range configured for the device. For example, if the range is 4520~4524, enter 4524.
- ID : Enter the device ID that you have specified.
- Password : Enter the password for the device that you have specified.
  - Password setup of the device to be added is optional, there is no need to enter the password.

3. Provide necessary information and touch <**Save**> button.

4. Select a profile.

- User must select a profile for video recording if the device to be added is a network camera or an encoder. A profile's properties can be viewed and edited with Web Viewer, where iPOLiS mobile only provides selecting one that is optimal for the displaying device from existing profiles.

5. Select a channel.

- For adding a DVR/NVR, user must select a channel for the connection. A channel's properties can be viewed and edited with Web Viewer, where iPOLiS mobile only provides selecting one to monitor, for the displaying device.

6. Once completed with connecting to the device, it is added to the device list.

- If settings of the added device are edited on the Web Viewer after adding it to your application, then iPOLiS mobile may fail to recognize changed device. In such cases, move to the editing page of the corresponding device and touch <**Save**> button to revive the connection again.

❖ Recommended Profile Information

It is recommended to set the profile as shown below for optimal Live video monitoring with iPOLiS mobile.

Configuration

Device	Profile Setting	
N/W camera	Setup	Video Setup
DVR	Network Setup	Live Transfer
H/W NVR	Network Setup	Live Transfer
S/W NVR	Video Setup	Live Streaming Video Source 2

Video Profile Setup

Codec	Resolution	Frame Rate	Compression / Transmission Quality
MJPEG	320X240 / CIF	5fps	Normal (10)
H.264	320X240 / CIF	10fps	Normal (10)

- Videos of more than 1.3M pixels are not supported.
- For real-time monitoring, only key frames are provided.
- According to the network stability, connection may suffer from stuttering or interruption.

2. Editing and Deleting the Device List

To edit the device information

1. Touch the menu button on your device.
   Menu icons will appear on the bottom side of the screen.
2. Touch the Edit < > button.
3. Select a device to edit from the list.
   You can also touch < > in the rightmost of the device item.
4. When you have completed your changes, touch <**Save**>.

To delete a device

1. Touch the menu button on your device.
   Menu icons will appear on the bottom side of the screen.
2. Touch the Delete < > button.
3. Select a device to delete from the list.
4. When done, touch <**OK**>.
   The selected device will be removed from the list.

3. Live Monitoring

To connect to a device

1. Run iPOLiS mobile, and touch the desired device to be connected once device list appears.
2. Selecting a network camera or encoder will display video screen in one-channel mode.
3. Selecting a DVR/NVR will display 4-split video screen in quad mode.

To change the channel

1. Touch the screen to display control buttons near the bottom.
2. Touch the Channel Change icon < > . The camera list appears.
3. Select a channel to display on the screen.

- In quad mode display, 4 channels are grouped as one, which results displaying CH5 ~ CH8 if selected channel 7.

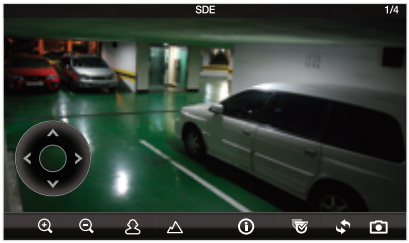
	Touch and slide your finger on the screen from right to left to slide over to the next 4 channels in quad mode display.

To switch to one-channel mode

Touch and hold briefly one of displayed 4 channels on the screen, or double touch on the desired split to switch to one-channel display mode with the selected channel.

4. Controlling the Live Video

iPOLis mobile supports video control only in one-channel mode.

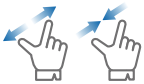


To control zooming

You can control the network camera's optical zooming remotely.

1. Touch the screen to display control buttons near the bottom.
2. For zoom-capable cameras, touching < ⊕ > icon zooms in, and touching < ⊖ > icon zooms out.

▪ Zooming range and level differ from camera to camera.



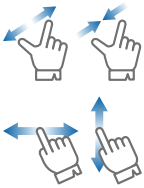
You can also zoom in by pinch open using two fingers on the screen. To zoom out, pinch close on the screen.

To control digital zooming

This function is for cameras not supporting optical zooming.

1. Touch the screen to display control buttons near the bottom.
2. Touch < ⊕ > button to zoom in, and touch < ⊖ > to zoom out digitally.

- Current digital zooming level is noted next to the digital zoom box, and digital zooming supports zooming up to x16.



You can also zoom in by pinch open using two fingers on the screen. To zoom out, pinch close on the screen.

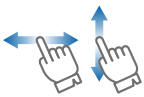
Touch and hold to drag the screen in any direction to reveal the hidden part of the image if enlarged bigger than the screen.

To control Pan / Tilt

Supported by PTZ cameras only.

1. Touch the screen to display Pan/Tilt control buttons on the screen.
2. Touching the direction button moves camera's pan/tilt to the next step one by one.
3. Touch and hold any of the direction buttons to pan and tilt the camera continuously in the selected direction.

- Pan/tilt range and level differ from camera to camera.

	Drag the screen in up/down/left/right direction to pan/tilt the camera. Note that iPOLiS mobile does not recognize diagonal direction, which will interpret user's dragging as the closest vertical or horizontal dragging.

- Pan/tilt control result requires time for processing, since the command should reach camera device and performed by the camera. Video data size grows as the camera moves, which may result in delayed display. In 3G networks, it may take more than a few seconds to receive video data.
- In a network environment of poor stability, using pan/tilt control with lower video quality settings may help reduce such delays.

To adjust focus

Supported by PTZ cameras only.

1. Touch the screen to display focus control buttons on the screen.
2. Use Near Focus < > and Far Focus < > icons to adjust the focus range.

To check device information

You can check the configuration information of a registered device.

1. Touch Check Information < > icon near the bottom of the screen.
2. A popup window with basic information of the connected device appears.

- To change the device settings, you should make a change manually for each setting item.

To flip video image displayed

You can flip video image by rotating 180°.

1. Touch the screen to display menu and touch < > icon.
2. Touch again to revert to the original screen.

To save the captured screen

Captures the currently displayed image and saves to the device storage as an image file.

1. Touch the screen to display menu and touch < > icon.
2. The captured screen is saved as an image file in the device's image folder.

To listen to the Live Audio

Live audio is provided if the network camera supports audio transmission. In Wi-Fi and 4G (LTE) networking environments, the storage device supports audio playback in 1-channel mode.

- In case of DVR, audio becomes not available for setting of less than 200 kbps.

5. Searching / Playing Saved Video

To search by date/time

Touch Search < > tab on top of the main screen to display list of devices for search.

1. Select a device by touching it.
2. Select a channel from the list to be searched.

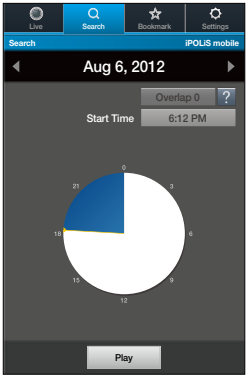
3. Dates containing data of the selected device and channel are marked in the calendar. Touch < ◂ ▸ > button on the calendar's both ends of year/month indicator to traverse to the previous/next month.
4. Touch a date to search video, and the circular timeline (24 hours) appears. Timeline is marked with color for time zones having recorded data to be searched.

- If there are overlapping multiple data for the same time range, an overlapping list appears.

To play searched video

After searching with date/time, set the beginning time to play the selected video.

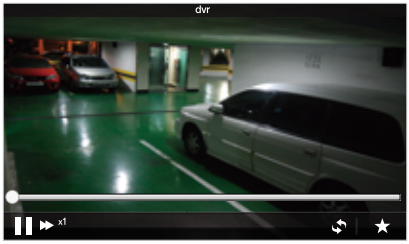
1. Check with the timeline, and select the desired beginning time to play.
2. Touch <**Start Time**> to set the beginning time once time setup dialog appears.
3. Touch <**Play**> button to start video playback and it plays for about 60 minutes from the beginning time.



- If the recorded video being played has interval of having no video, playback skips such interval and continues from the next existing position. The displayed play time may be different than the actual recording time depending on performance of network and playing device.
- For the efficiency, Audio is disabled during play.

To control playback

It provides basic playback control.



1. Touch the screen to display control buttons near the bottom.
2. To stop playback, touch < ❚❚ > button to pause and the button switches to < ▶ > once paused.
3. To resume again, touch < ▶ > button.
4. To control playback speed, touch < ▶▶ > button and the playback speed indicator appears.
5. The video is played at the selected play speed.
6. Touch < ⟲ > icon to flip video image by rotating 180°.

To use the Timeline

You can jump to a certain point of playback by selecting time point on the timeline.

1. Touch the screen to display 60-minute timeline.
2. The timeline shows the played video's current playback time point.
3. Touch the time picker < ○▬ > on the timeline, and drag it to a desired time point to skip to that point.
4. Touching the timeline automatically pauses the video playback. Move the time picker and touch < ▶ > button to resume playing.

To use Bookmark

You can bookmark a certain playback point on the video as a starting point.

1. While playing a video, touch < ★ > button at a desired point to create a bookmark.
2. The Add Bookmark popup appears, enter a note of the bookmark and save it. Inserting a note is optional, bookmark will be saved without a note.

- Up to 100 bookmarks can be added, and selectively deleted once exceeded.

3. To play a video from a bookmarked point, move to the Bookmark < ☆ > tab on top of the main screen.
4. Select a desired bookmark from the list.

- Playback control for bookmarked video is the same as that of searched video.

❖ Amount of Network Data Transfer for stored video

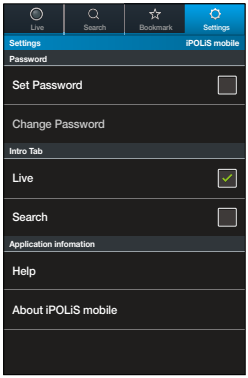
Codec	Resolution	Frame Rate	Compression	Bandwidth
H.264	640 x 480	10fps	10	0.69 Mbps
H.264	640 x 480	20fps	10	1.30 Mbps
H.264	800 x 600	10fps	10	1.10 Mbps
H.264	800 x 600	20fps	10	1.90 Mbps

- Above network data transmission is calculated based on SNB-7000.
- Videos of more than 1.3M pixels are not supported.
- For smooth and proper playback of stored recordings, it requires downloading **bandwidth** more than the specified minimum bandwidth in case if the network has interference.

6. Setting the iPOLiS mobile

To set/cancel/change password

1. Touch the Settings < > tab on top of the main screen. Select the <**Set Password**>.



2. Enter a new password.
   The <**Set Password**> checkbox will be changed to < >. Then, you are prompted to enter a new password.

   - For the password, use alphabet and number in eight digits.

3. To cancel setting the password, touch <**Set Password**> again.
4. If you enter the currently registered password, the password setting will be canceled.
5. To change the password, touch <**Change Password**> and enter a new password.

   - If you forgot password, uninstall the application and then download it to install again.

To set the starting page

1. Select the start page screen from the "**Intro Tab**" menu of the settings page, which will be displayed once iPOLiS mobile is executed.
2. Selecting the <**Live**> will display live device list where <**Search**> will display device search at the beginning.

To see help screen

1. In the settings page, touch <**Help**> to display language setup page.
2. Select your language and iPOLiS mobile help page in the selected language will appear.

- It may automatically detect your displaying device's language configured and provide help in that language. iPOLiS mobile's help is provided in 13 languages, and the default language is set to English.

To check the software version

1. Touch <**About iPOLiS mobile**> in the settings page.
2. You can check the information of the current software version.

- This application uses FFmpeg under LGPL v2.1.

7. Models supporting iPOLiS mobile v2.2

Device Model			Firmware version
N/W Camera	Box/ Dome	SNB-5000, SND-5080/F, SNV-5080, SNV-5010, SNO-5080R, SNV-5080R	v2.10 or Higher
		SNB-7000, SND-7080/F, SNV-7080, SNO-7080R, SNV-7080R	v1.20 or Higher
		SNB-1001, SND-1080, SND-1011, SNV-1080, SNO-1080R, SNV-1080R	v1.00 or Higher
		SNB-3002, SND-3082/F, SNV-3082	v1.00 or Higher
		SNB-5001, SND-5061, SND-5011, SND-5010	v1.00 or Higher
		SNB-7001, SND-7061, SND-7011	v1.00 or Higher
		SNB-7002, SND-7082/F, SNV-7082, SNO-7082R	v1.00 or Higher
		SNZ-5200	v1.05 or Higher
		SNV-3120	v1.24 or higher
		SNV-7082V, SND-7082V, SND-7082FV, SNO-7082RV	v1.00 or Higher
		SNB-6004, SNB-6003, SND-6084, SND-6083	v1.00 or Higher
	PTZ	SNP-3120, SNP-3120V, SNP-3120VH	v1.27 or Higher
		SNP-5200, SNP-5200H	v2.00 or Higher
		SNP-5300, SNP-5300H	v1.00 or Higher
		SNP-3371, SNP-3371H, SNP-3371TH	v1.01 or Higher
		SNP-3302, SNP-3302H	v1.01 or Higher
		SNP-6200, SNP-6200H	v1.00 or Higher
Encoder		SPE-100, SPE-400, SPE-1600R, SPE-101	v1.04 or higher

Device Model			Firmware version
DVR	Live & Playback	SRD-1670/1650/1630/1610(D/DC), SRD-870/850/830(D/DC), SRD-470(D)	v1.12 or higher
		SRD-1652D/852D,1650DU	v1.12 or higher
		SRD-1671/1651/871/851/471	v1.12 or higher
		SRD-1673(D)/873D, 1653D	v1.01 or Higher
	Live only	SRD-440	v1.05 or higher
		SRD-442	v1.02 or higher
		SRD-1640/840	v1.03 or higher
		SRD-1641/841	v1.03 or higher
		SDE-5001/5002/4001/4004(V)	v1.02 or higher
		SDE-3001/3003	v1.06 or higher
		SDE-4001/4002/5001/5002	v1.00 or higher
NVR	H/W	SRN-470D, SRN-1670D, SRN-1671	v1.05 or higher
	S/W	NET-i ware	v1.39 or higher

8. OPEN SOURCE ANNOUNCEMENT

OPEN SOURCE ANNOUNCEMENT

- **LGPL 2.1** : FFmpeg
- **BSD 2.0** : ed-pad
- **MIT License V2** : dlc.sh-GUI, SAS-iPad-App, TweetNow

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

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[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

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Preamble

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